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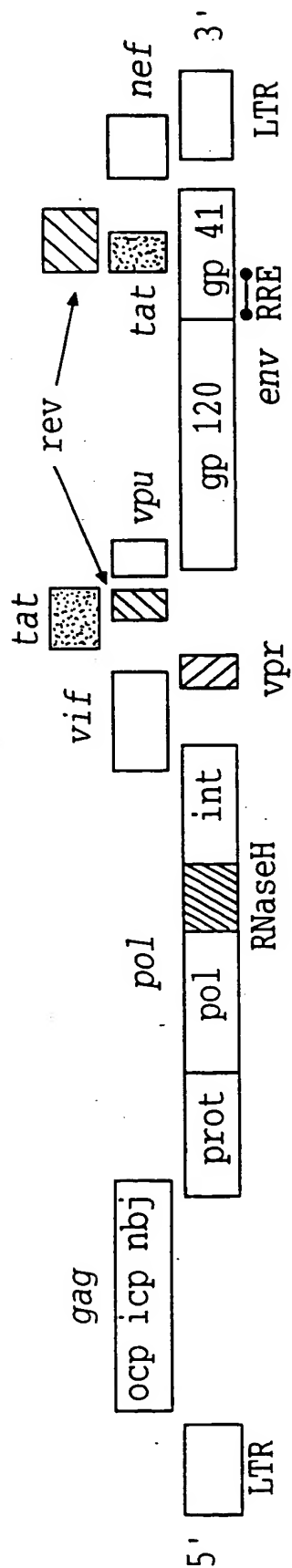
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FIG. 1

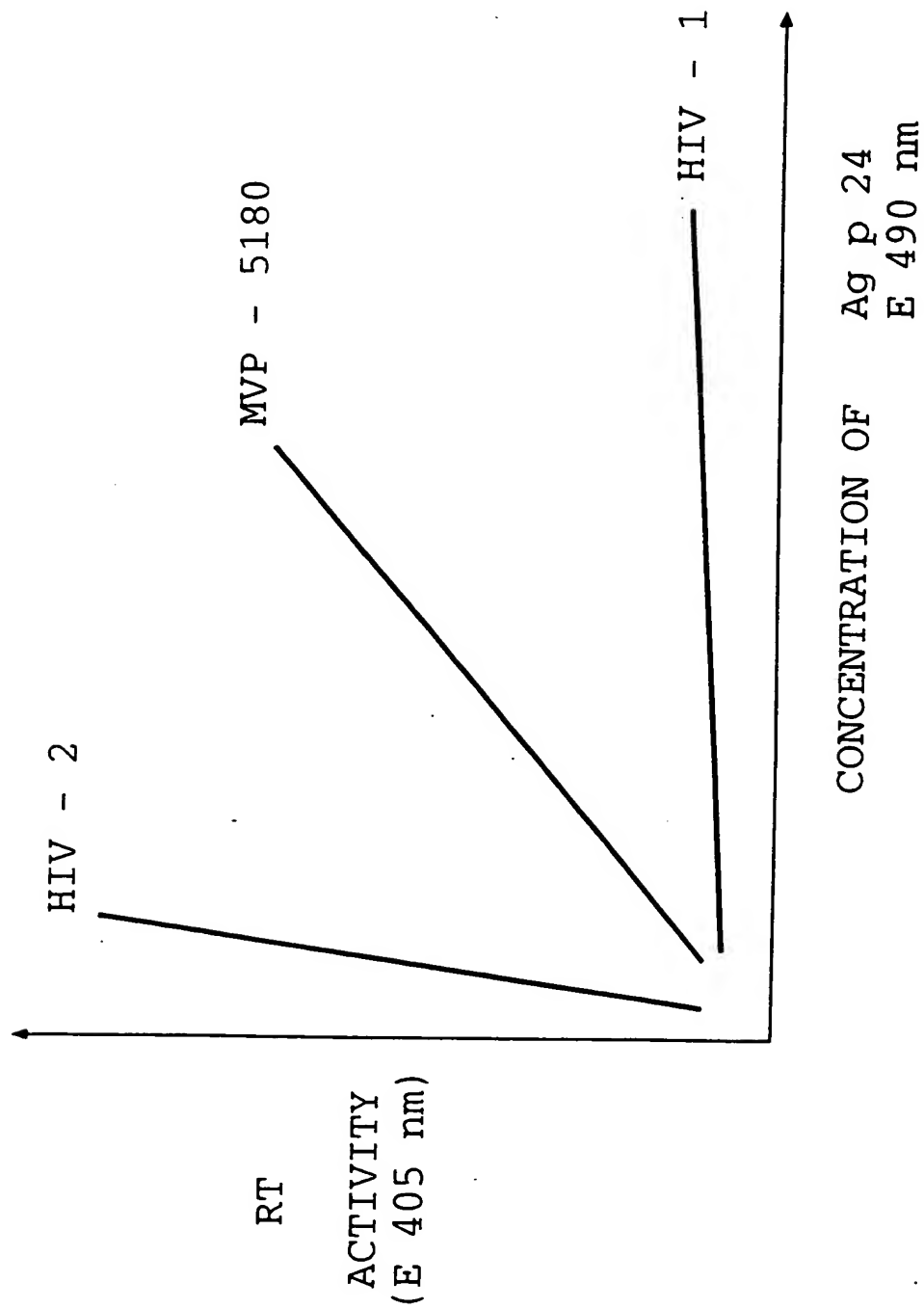


FIG. 2

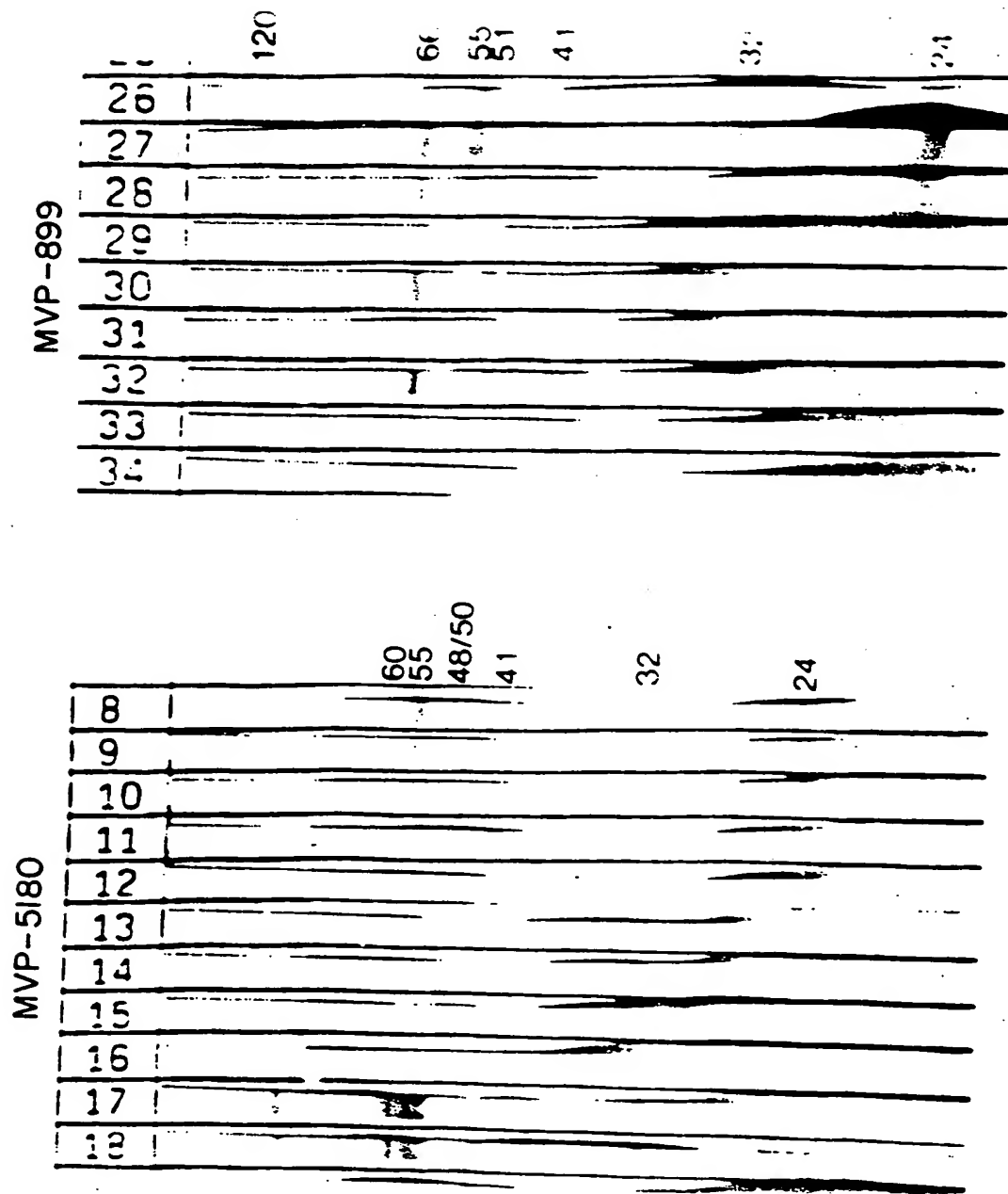


FIG. 3

SEQUENCE OF MVP-5180

(SEQ. ID NO. 56)

1 CTGGATGGGT TAATTTACTC CCATAAGAGA GCAGAAATCC TGGATCTCTG
51 GATATATCAC ACTCAGGGAT TCTTCCCTGA TTGGCAGTGT TACACACCGG
101 GACCAGGACC TAGATTCCCA CTGACATTTG GATGGTTGTT TAAACTGGTA
151 CCAGTGTCAG CAGAAGAGGC AGAGAGACTG GGTAATACAA ATGAAGATGC
201 TAGTCTTCTA CATCCAGCTT GTAATCATGG AGCTGAGGAT GCACACGGGG
251 AGATACTAAA ATGGCAGTTT GATAGATCAT TAGGCTTAAC ACATATAGCC
301 CTGCAAAAGC ACCCAGAGCT CTTCCCCAAG TAACTGACAC TGCGGGACTT
351 TCCAGACTGC TGACACTGCG GGGACTTTCC AGCGTGGGAG GGATAAGGGG
401 CGGTTCGGGG AGTGGCTAAC CCTCAGATGC TGCATATAAG CAGCTGCTTT
451 CCGCTTGTAC CGGGTCTTAG TTAGAGGACC AGGTCTGAGC CCGGGAGCTC
501 CCTGGCCTCT AGCTGAACCC GCTGCTTAAC GCTCAATAAA GCTTGCCTTC
551 AGTGAGAAGC AGTGTGTGCT CATCTGTTCA ACCCTGGTGT CTAGAGATCC
601 CTCAGATCAC TTAGACTGAA GCAGAAAATC TCTAGCAGTG GCGCCCGAAC
651 AGGGACGCGA AAGTGAAAGT GGAACCAGGG AAGAAAACCT CCGACGCAAC
701 GGGCTCGGCT TAGCGGAGTG CACCTGCTAA GAGGCGAGAG GAACTCACAA
751 GAGGGTGAGT AAATTTGCTG GCGGTGGCCA GACCTAGGGG AAGGGCGAAG
801 TCCCTAGGGG AGGAAGATGG GTGCGAGAGC GTCTGTGTTG ACAGGGAGTA
851 AATTGGATGC ATGGGAACGA ATTAGGTTAA GGCCAGGATC TAAAAAGGCA
901 TATAGGCTAA AACATTTAGT ATGGGCAAGC AGGGAGCTGG AAAGATACGC
951 ATGTAATCCT GGTCTATTAG AAACCTGCAGA AGGTACTGAG CAACTGCTAC
1001 AGCAGTTAGA GCCAGCTCTC AAGACAGGGT CAGAGGACCT GAAATCTCTC
1051 TGGAACGCAA TAGCAGTACT CTGGTGCGTT CACAACAGAT TTGACATCCG
1101 AGATACACAG CAGGCAATAC AAAAGTTAAA GGAAGTAATG GCAAGCAGGA
1151 AGTCTGCAGA GGCCGCTAAG GAAGAAACAA GCCCTAGGCA GACAAGTCAA
1201 AATTACCCTA TAGTAACAAA TGCACAGGGA CAAATGGTAC ATCAAGCCAT

FIG. 4-1

1251	CTCCCCCAGG	ACTTTAAATG	CATGGGTAAA	GGCAGTAGAA	GAGAAGGCCT
1301	TTAACCCTGA	AATTATTCCT	ATGTTTATGG	CATTATCAGA	AGGGGCTGTC
1351	CCCTATGATA	TCAATACCAT	GCTGAATGCC	ATAGGGGGAC	ACCAAGGGGC
1401	TTTACAAGTG	TTGAAGGAAG	TAATCAATGA	GGAAGCAGCA	GAATGGGATA
1451	GAACTCATCC	ACCAGCAATG	GGGCCGTTAC	CACCAGGGCA	GATAACGGAA
1501	CCAACAGGAA	GTGACATTGC	TGGAACAAC	AGCACACAGC	AAGAGCAAAT
1551	TATATGGACT	ACTAGAGGGG	CTAACTCTAT	CCCAGTAGGA	GACATCTATA
1601	GAAAATGGAT	AGTGCTAGGA	CTAAACAAAA	TGGTAAAAAT	GTACAGTCCA
1651	GTGAGCATCT	TAGATATTAG	GCAGGGACCA	AAAGAACCAT	TCAGAGATTA
1701	TGTAGATCGG	TTTTACAAAA	CATTAAGAGC	TGAGCAAGCT	ACTCAAGAAG
1751	TAAAGAATTG	GATGACAGAA	ACCTTGCTTG	TTCAGAATTC	AAACCCAGAT
1801	TGTAAACAAA	TTCTGAAAGC	ATTAGGACCA	GAAGCTACTT	TAGAAGAAAT
1851	GATGGTAGCC	TGTCAAGGAG	TAGGAGGGCC	AACTCACAAG	GCAAAAATAC
1901	TAGCAGAAGC	AATGGCTTCT	GCCCAGCAAG	ATTTAAAAGG	AGGATACACA
1951	GCAGTATTCA	TGCAAAGAGG	GCAGAATCCA	AATAGAAAAG	GGCCCATAAA
2001	ATGCTTCAAT	TGTGGAAGAG	AGGGACATAT	AGCAAAAAC	TGTCGAGCAC
2051	CTAGAAAAAG	GGGTTGCTGG	AAATGTGGAC	AGGAAGGTCA	CCAAATGAAA
2101	GATTGCAAAA	ATGGAAGACA	GGCAAATTTT	TTAGGGAAGT	ACTGGCCTCC
2151	GGGGGGCAGC	AGGCCAGGCA	ATTATGTGCA	GAAACAAGTG	TCCCCATCAG
2201	CCCCACCAAT	GGAGGAGGCA	GTGAAGGAAC	AAGAGAATCA	GAGTCAGAAG
2251	GGGGATCAGG	AAGAGCTGTA	CCCATTTGCC	TCCCTCAAAT	CCCTCTTTGG
2301	GACAGACCAA	TAGTCACAGC	AAAGGTTGGG	GGTCATCTAT	GTGAGGCTTT
2351	ACTGGATACA	GGGGCAGATG	ATACAGTATT	AAATAACATA	CAATTAGAAG
2401	GAAGATGGAC	ACCAAAAATG	ATAGGGGGTA	TAGGAGGCTT	TATAAAAGTA
2451	AAAGAGTATA	ACAATGTGAC	AGTAGAAGTA	CAAGGAAAGG	AAGTACAGGG
2501	AACAGTATTG	GTGGGACCTA	CTCCTGTAA	TATTCTTGGG	AGAAACATAT
2551	TGACAGGATT	AGGATGTACA	CTAAATTTCC	CTATAAGTCC	CATAGCCCCA

FIG. 4-2

2601 GTGCCAGTAA AGCTAAAACC AGGAATGGAT GGACCAAAG TAAACAATG
 2651 GCCCCTATCT AGAGAGAAAA TAGAAGCACT AACTGCAATA TGTCAAGAAA
 2701 TGGAACAGGA AGGAAAAATC TCAAGAATAG GACCTGAAAA TCCTTATAAT
 2751 ACACCTATTT TTGCTATAAA AAAGAAAGAT AGCACTAAGT GGAGAAAATT
 2801 GGTAGACTTC AGAGAATTAA ATAAAAGAAC ACAAGATTTC TGGGAGGTGC
 2851 AATTAGGTAT TCCACATCCA GGGGGTTTAA AGCAAAGGCA ATCTGTTACA
 2901 GTCTTAGATG TAGGAGATGC TTATTTCTCA TGCCCTTTAG ATCCAGACTT
 2951 TAGAAAATAC ACTGCCTTCA CTATTCCTAG TGTGAACAAT GAGACCCAG
 3001 GAGTAAGATA CCAGTACAAT GTCCTCCCGC AAGGGTGGAA AGGTTACCA
 3051 GCCATATTTC AGAGTTCAAT GACAAAGATT CTAGATCCAT TTAGAAAAG
 3101 CAACCCAGAA GTAGAAATTT ATCAGTACAT AGATGACTTA TATGTAGGAT
 3151 CAGATTTACC ATTGGCAGAA CATAGAAAGA GGGTCGAATT GCTTAGGGAA
 3201 CATTTATATC AGTGGGGATT TACTACCCCT GATAAAAAGC ATCAGAAGGA
 3251 ACCTCCCTTT TTATGGATGG GATATGAGCT CCACCCAGAC AAGTGGACAG
 3301 TACAGCCCAT CCAATTGCCT GACAAAGAAG TGTGGACAGT AAATGATATA
 3351 CAAAATTAG TAGGAAAATT AAATTGGGCA AGTCAAATCT ATCAAGGAAT
 3401 TAGAGTAAAA GAATTGTGCA AGTTAATCAG AGGAACCAA TCATTGACAG
 3451 AGGTAGTACC TTTAAGTAAA GAGGCAGAAC TAGAATTAGA AGAAAACAGA
 3501 GAAAAGCTAA AAGAGCCAGT ACATGGAGTA TATTACCAGC CTGACAAAGA
 3551 CTTGTGGGTT AGTATTCAGA AGCATGGAGA AGGGCAATGG ACTTACCAGG
 3601 TATATCAGGA TGAACATAAG AACCTTAAAA CAGGAAAATA TGCTAGGCAA
 3651 AAGGCCTCCC ACACAAATGA TATAAGACAA TTGGCAGAAG TAGTCCAGAA
 3701 GGTGTCTCAA GAAGCTATAG TTATATGGGG GAAATTACCT AAATTCAGGC
 3751 TGCCAGTTAC TAGAGAACT TGGGAACTT GGTGGGCAGA ATATTGGCAG
 3801 GCCACCTGGA TTCCTGAATG GGAATTTGTC AGCACACCCC CATTGATCAA
 3851 ATTATGGTAC CAGTTAGAAA CAGAACCTAT TGTAGGGGCA GAAACCTTTT
 3901 ATGTAGATGG AGCAGCTAAT AGGAATACAA AACTAGGAAA GCGGGGATAT

FIG. 4-3

3951 GTTACAGAAC AAGGAAAACA GAACATAATA AAGTTAGAAG AGACAACCAA
 4001 TCAAAAGGCT GAATTAATGG CTGTATTAAT AGCCTTGCAG GATTCCAAGG
 4051 AGCAAGTAAA CATAGTAACA GACTCACAAT ATGTATTGGG CATCATATCC
 4101 TCCCAACCAA CACAGAGTGA CTCCCCTATA GTTCAGCAGA TAATAGAGGA
 4151 ACTAACAAAA AAGGAACGAG TGTATCTTAC ATGGGTTCCT GCTCACAAAG
 4201 GCATAGGAGG AAATGAAAAA ATAGATAAAT TAGTAAGCAA AGACATTAGA
 4251 AGAGTCCTGT TCCTGGAAGG AATAGATCAG GCACAAGAAG ATCATGAAAA
 4301 ATATCATAGT AATTGGAGAG CATTAGCTAG TGACTIONTGA TTACCACCAA
 4351 TAGTAGCCAA GGAAATCATT GCTAGTTGTC CTAAATGCCA TATAAAAGGG
 4401 GAAGCAACGC ATGGTCAAGT AGACTACAGC CCAGAGATAT GGCAAATGGA
 4451 TTGTACACAT TTAGAAGGCA AAATCATAAT AGTTGCTGTC CATGTAGCAA
 4501 GTGACTTTAT AGAAGCAGAG GTGATACCAG CAGAAACAGG ACAGGAAACT
 4551 GCCTATTTCC TGTAAAAATT AGCAGCAAGA TGGCCTGTCA AAGTAATACA
 4601 TACAGACAAT GGACCTAATT TTACAAGTGC AGCCATGAAA GCTGCATGTT
 4651 GGTGGACAGG CATAACAACAT GAGTTTGGGA TACCATATAA TCCACAAAGT
 4701 CAAGGAGTAG TAGAAGCCAT GAATAAAGAA TTAAAATCTA TTATACAGCA
 4751 GGTGAGGGAC CAAGCAGAGC ATTTAAAAAC AGCAGTACAA ATGGCAGTCT
 4801 TTGTTACAAA TTTTAAAAGA AAAGGGGGGA TTGGGGGGTA CACTGCAGGG
 4851 GAGAGACTAA TAGACATACT AGCATCACAA ATACAAACAA CAGAACTACA
 4901 AAAACAAATT TTAAAAATCA ACAATTTTCG GGTCTATTAC AGAGATAGCA
 4951 GAGACCCTAT TTGGAAAGGA CCGGCACAAC TCCTGTGGAA AGGTGAGGGG
 5001 GCAGTAGTCA TACAAGATAA AGGAGACATT AAAGTGGTAC CAAGAAGAAA
 5051 GGCAAAAATA ATCAGAGATT ATGGAAAACA GATGGCAGGT ACTGATAGTA
 5101 TGGCAAATAG ACAGACAGAA AGTGAAAGCA TGGAACAGCC TGGTGAAATA
 5151 CCATAAATAC ATGTCTAAGA AGGCCGCGAA CTGGCGTTAT AGGCATCATT
 5201 ATGAATCCAG GAATCCAAAA GTCAGTTCGG CGGTGTATAT TCCAGTAGCA
 5251 GAAGCTGATA TAGTGGTCAC CACATATTGG GGATTAATGC CAGGGGAAAG

FIG. 4-4

5301 AGAGGAACAC TTGGGACATG GGGTTAGTAT AGAATGGCAA TACAAGGAGT
5351 ATAAACACA GATTGATCCT GAAACAGCAG ACAGGATGAT ACATCTGCAT
5401 TATTTACAT GTTTTACAGA ATCAGCAATC AGGAAGGCCA TTCTAGGGCA
5451 GAGAGTGCTG ACCAAGTGTG AATACCTGGC AGGACATAGT CAGGTAGGGA
5501 CACTACAATT CTTAGCCTTG AAAGCAGTAG TGAAAGTAAA AAGAAATAAG
5551 CCTCCCCTAC CCAGTGTCCA GAGATTAACA GAAGATAGAT GGAACAAGCC
5601 CTGGAAAATC AGGGACCAGC TAGGGAGCCA TTCAATGAAT GGACACTAGA
5651 GCTCCTGGAA GAGCTGAAAG AAGAAGCAGT AAGACATTTT CCTAGGCCTT
5701 GGTTACAAGC CTGTGGGCAG TACATTTATG AGACTTATGG AGACACTTGG
5751 GAAGGAGTTA TGGCAATTAT AAGAATCTTA CAACAACACTAC TGTTTACCCA
5801 TTATAGAATT GGATGCCAAC ATAGTAGAAT AGGAATTCTC CCATCTAACA
5851 CAAGAGGAAG AGGAAGAAGA AATGGATCCA GTAGATCCTG AGATGCCCCC
5901 TTGGCATCAC CCTGGGAGCA AGCCCCAAC CCCTTGTAAT AATTGCTATT
5951 GCAAAAGATG CTGCTATCAT TGCTATGTTT GTTTCACAAA GAAGGGTTTG
6001 GGAATCTCCC ATGGCAGGAA GAAGCGAAGA AGACCAGCAG CTGCTGCAAG
6051 CTATCCAGAT AATAAAGATC CTGTACCAGA GCAGTAAGTA ACGCTGATGC
6101 ATCAAGAGAA CCTGCTAGCC TTAATAGCTT TAAGTGCTTT GTGTCTTATA
6151 AATGTACTTA TATGGTTGTT TAACCTTAGA ATTTATTTAG TGCAAAGAAA
6201 ACAAGATAGA AGGGAGCAGG AAATACTTGA AAGATTAAGG AGAATAAAGG
6251 AAATCAGGGA TGACAGTGAC TATGAAAGTA ATGAAGAAGA ACAACAGGAA
6301 GTCATGGAGC TTATACATAG CCATGGCTTT GCTAATCCCA TGTTTGAGTT
6351 ATAGTAAACA ATTGATATGCC ACAGTTTATT CTGGGGTACC TGTATGGGAA
6401 GAGGCAGCAC CAGTACTATT CTGTGCTTCA GATGCTAACC TAACAAGCAC
6451 TGAACAGCAT AATATTTGGG CATCACAAGC CTGCGTTCCT ACAGATCCCA
6501 ATCCACATGA ATTTCCACTA GGCAATGTGA CAGATAACTT TGATATATGG
6551 AAAAATTACA TGGTGGACCA AATGCATGAA GACATCATTA GTTTGTGGGA
6601 ACAGAGTTTA AAGCCTTGTG AGAAAATGAC TTTCTTATGT GTACAAATGA

FIG. 4-5

6651 ACTGTGTAGA TCTGCAAACA AATAAACAG GCCTATTAAA TGAGACAATA
 6701 AATGAGATGA GAAATTGTAG TTTAATGTA ACTACAGTCC TCACAGACAA
 6751 AAAGGAGCAA AACAGGCTC TATTCTATGT ATCAGATCTG AGTAAGGTTA
 6801 ATGACTCAAA TGCAGTAAAT GGAACAACAT ATATGTTAAC TAATTGTAAC
 6851 TCCACAATTA TCAAGCAGGC CTGTCCGAAG GTAAGTTTGT AGCCCATTCC
 6901 CATACTAT TGTGCTCCAA CAGGATATGC CATCTTTAAG TGTAATGACA
 6951 CAGACTTTAA TGGAACAGGC CTATGCCACA ATATTTTCACT GGTACTTGT
 7001 ACACATGGCA TCAAGCCAAC AGTAAGTACT CAACTAATAC TGAATGGGAC
 7051 ACTCTCTAGA GAAAAGATAA GAATTATGGG AAAAAATATT ACAGAATCAG
 7101 CAAAGAATAT CATAGTAACC CTAAACACTC CTATAACAT GACCTGCATA
 7151 AGAGAAGGAA TTGCAGAGGT ACAAGATATA TATACAGGTC CAATGAGATG
 7201 GCGCAGTATG AACTTAAAA GAAGTAACAA TACATCACCA AGATCAAGGG
 7251 TAGCTTATTG TACATATAAT AAGACTGTAT GGGAAAATGC CCTACAACAA
 7301 ACAGCTATAA GGTATTTAAA TCTTGTAAC CAAACAGAGA ATGTTACCAT
 7351 AATATTCAGC AGAACTAGTG GTGGAGATGC AGAAGTAAGC CATTTACATT
 7401 TTAAGTGTCA TGGAGAATTC TTTTATTGTA ACACATCTGG GATGTTTAAC
 7451 TATACTTTTA TCAACTGTAC AAAGTCCGGA TGCCAGGAGA TCAAAGGGAG
 7501 CAATGAGACC AATAAAAATG GTACTATACC TTGCAAGTTA AGACAGCTAG
 7551 TAAGATCATG GATGAAGGGA GAGTCGAGAA TCTATGCACC TCCCATCCCC
 7601 GGCAACTTAA CATGTCATTC CAACATAACT GGAATGATTC TACAGTTAGA
 7651 TCAACCATGG AATTCCACAG GTGAAAATAC ACTTAGACCA GTAGGGGGAG
 7701 ATATGAAAGA TATATGGAGA ACTAAATTGT ACAACTACAA AGTAGTACAG
 7751 ATAAAACCTT TTAGTGTAGC ACCTACAAA ATGTCAAGAC CAATAATAAA
 7801 CATTACACC CCTCACAGGG AAAAAAGAGC AGTAGGATTG GGAATGCTAT
 7851 TCTTGGGGGT GCTAAGTGCA GCAGGTAGCA CTATGGGCGC AGCGGCAACA
 7901 GCGCTGACGG TACGGACCCA CAGTGTACTG AAGGGTATAG TGCAACAGCA
 7951 GGACAACCTG CTGAGAGCGA TACAGGCCCA GCAACACTTG CTGAGGTTAT

FIG. 4-6

8001 CTGTATGGGG TATTAGACAA CTCCGAGCTC GCCTGCAAGC CTTAGAAACC
 8051 CTTATACAGA ATCAGCAACG CCTAAACCTA TGGGGCTGTA AAGGAAACT
 8101 AATCTGTTAC ACATCAGTAA AATGGAACAC ATCATGGTCA GGAAGATATA
 8151 ATGATGACAG TATTTGGGAC AACCTTACAT GGCAGCAATG GGACCAACAC
 8201 ATAAACAATG TAAGCTCCAT TATATATGAT GAAATACAAG CAGCACAAGA
 8251 CCAACAGGAA AAGAATGTAA AAGCATTGTT GGAGCTAGAT GAATGGGCCT
 8301 CTCTTTGGAA TTGGTTTGAC ATA ACTAAAT GGTGTGGTA TATAAAAATA
 8351 GCTATAATCA TAGTGGGAGC ACTAATAGGT ATAAGAGTTA TTATGATAAT
 8401 ACTTAATCTA GTGAAGAACA TTAGGCAGGG ATATCAACCC CTCTCGTTGC
 8451 AGATCCCTGT CCCACACCGG CAGGAAGCAG AAACGCCAGG AAGAACAGGA
 8501 GAAGAAGGTG GAGAAGGAGA CAGGCCCAAG TGGACAGCCT TGCCACCAGG
 8551 ATTCTTGCAA CAGTTGTACA CGGATCTCAG GACAATAATC TTGTGGACTT
 8601 ACCACCTCTT GAGCAACTTA ATATCAGGGA TCCGGAGGCT GATCGACTAC
 8651 CTGGGACTGG GACTGTGGAT CCTGGGACAA AAGACAATTG AAGCTTGTAG
 8701 ACTTTGTGGA GCTGTAATGC AATATTGGCT ACAAGAATTG AAAAATAGTG
 8751 CTACAAACCT GCTTGATACT ATTGCAGTGT CAGTTGCCAA TTGGACTGAC
 8801 GGCATCATCT TAGGTCTACA AAGAATAGGA CAAGGATTCC TTCACATCCC
 8851 AAGAAGAATT AGACAAGGTG CAGAAAGAAT CTTAGTGTA CATGGGGAAT
 8901 GCATGGAGCA AAAGCAAATT TGCAGGATGG TCAGAAGTAA GAGATAGAAT
 8951 GAGACGATCC TCCTCTGATC CTCAACAACC ATGTGCACCT GGAGTAGGAG
 9001 CTGTCTCCAG GGAGTTAGCA ACTAGAGGGG GAATATCAAG TTCCCACACT
 9051 CCTCAAACA ATGCAGCCCT TGCATTCTTA GACAGCCACA AAGATGAGGA
 9101 TG TAGGCTTC CCAGTAAGAC CTCAAGTGCC TCTAAGGCCA ATGACCTTTA
 9151 AAGCAGCCTT TGACCTCAGC TTCTTTTAA AAGAAAAGGG AGGACTGGAT
 9201 GGGTTAATTT ACTCCCATAA GAGAGCAGAA ATCCTGGATC TCTGGATATA
 9251 TCACACTCAG GGATTCTTCC CTGATTGGCA GTGTTACACA CCGGGACCAG
 9301 GACCTAGATT CCCACTGACA TTTGGATGGT TGTTTAAACT GGTACCAGTG

FIG. 4-7

9351 TCAGCAGAAG AGGCAGAGAG ACTGGGTAAT ACAAATGAAG ATGCTAGTCT
9401 TCTACATCCA GCTTGTAATC ATGGAGCTGA GGATGCACAC GGGGAGATAC
9451 TAAAATGGCA GTTTGATAGA TCATTAGGCT TAACACATAT AGCCCTGCAA
9501 AAGCACCCAG AGCTCTTCCC CAAGTAACTG ACACTGCGGG ACTTTCCAGA
9551 CTGCTGACAC TGCGGGGACT TTCCAGCGTG GGAGGGATAA GGGGCGGTTC
9601 GGGGAGTGGC TAACCCTCAG ATGCTGCATA TAAGCAGCTG CTTTCCGCTT
9651 GTACCGGGTC TTAGTTAGAG GACCAGGTCT GAGCCCGGGA GCTCCCTGGC
9701 CTCTAGCTGA ACCCGCTGCT TAACGCTCAA TAAAGCTTGC CTTGAGTGAG
9751 AAGCAGTGTG TGCTCATCTG TTCAACCCTG GTGTCTAGAG ATC

FIG. 4-8

STRATEGY FOR PCR AMPLIFICATION,
CLONING AND SEQUENCING:

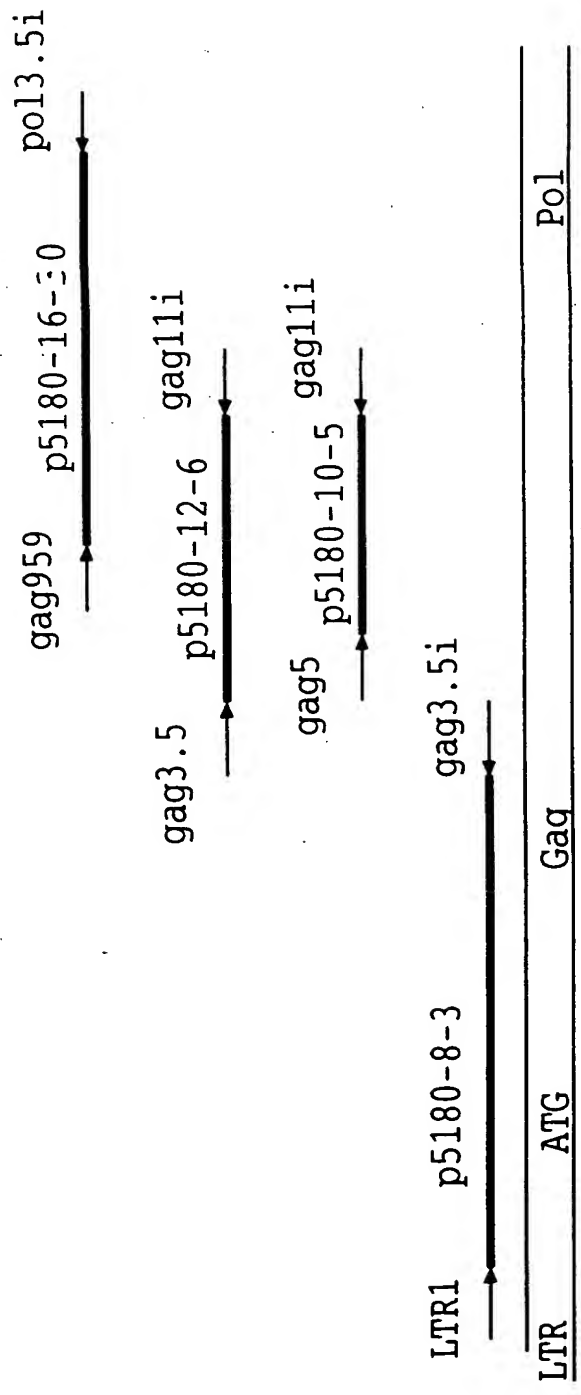


FIG. 5

(SEQUENCE ID NO. 57 + 58)

MvP5180

685	AAACCTCCGACGCAACGGGCTCGGCTTAGCGGAGTGCACCTGCTAAGAGG	734
1		50
	aaacctccaacgcaacgggctcggcttagcggagtgcacctgctaagagg	
735	CGAGAGGAACTCACAAGAGGGTGAGTAAATTTGCTGGCGGTGGCCAGACC	784
51		100
	cgagaggaactcacaagaggggtgagtaaatttgctggcgggtggccagacc	
785	TAGGGGAAGGGCGAAGTCCCTAGGGGAGGAAGATGGGTGCGAGAGCGTCT	834
101		150
	taggggaagggcgaagtccctaggggaggaagatgggtgcgagacggtct	
835	GTGTTGACAGGGAGTAAATTGGATGCATGGGAACGAATTAGGTAAAGGCC	884
151		200
	gtgttgacagggagtaaattggatgcatgggaacgaattaggttaaggcc	
885	AGGATCTAAAAGGCATATAGGCTAAAACATTTAGTATGGGCAAGCAGGG	934
201		200
	aggatctaaaagggcatataggctaaaAcatttagtatgggcaagcaggg	
935	AGCTGGAAAGATACGCATGTAATCCTGGTCTATTAGAAACTGCAGAAGGT	984
251		300
	agctggaaagatacgcatataatcctggtctactagaaactgcagaaggt	
985	ACTGAGCAACTGCTACAGCAGTTAGAGCCAGCTCTCAAGACAGGGTCAGA	1034
301		350
	actgaacaactgctacagcagttagagccagctctcaagacagggtcaga	
1035	GGACCTGAAATCTCTCTGGAACGCAATAGCAGTACTCTGGTGC GTTCACA	1084
351		400
	ggacctgaaatccctctggaacgcaatagcagtactctggtgcgttcaca	
1085	ACAGATTTGACATCCGAGATACACAGCAGGCAATACAAAAGTTAAAGGAA	1134
401		450
	acagatttgacatccgagatacacagcaggcaatacaaaaagttaaaggaa	
1135	GTAATGGCAAGCAGGAAGTCTGCAGAGGCCGCTAAGGAAGAAACAAGCCC	1184
451		500
	gtaatggcaagcaggaagtctgcagaggccgctaaggaagaaacaagctc	

FIG.6-1

1685	AACCATTTCAGAGATTATGTAGATCGGTTTTACAAAACATTAAGAGCTGAG	1734
1001	aaccatttcagagattatgtagatcggttttacaaaacattaagagctgag	1050
1735	CAAGCTACTCAAGAAGTAAAGAATTGGATGACAGAAACCTTGCTTGTTCA	1784
1051	caagctactcaagaagtaaagaattggatgacagaaaccctcgttgttca	1100
1785	GAATTCAAACCCAGATTGTAAACAAATTCTGAAAGCATTAGGACCAGAAG	1834
1101	gaattcaaaccagattgtaaacaattctgaaagcattaggaccaggag	1150
1835	CTACTTTAGAAAGAAATGATGGTAGCCTGTCAAGGAGTAGGAGGGCCAAC	1884
1151	ctactttagaagaaatgatggtagcctgtcaaggagtaggagggccaact	1200
1885	CACAAGGCAAAAATACTAGCAGAAGCAATGGCTTCTGCCCAGCAAGATTT	1934
1201	cacaaggcaaaaatactagcagaagcaatggcttctgcccagcaagattt	1250
1935	AAAAGGAGGATACACAGCAGTATTCATGCAAGAGGGCAGAATCCAAATA	1984
1251	aaaggaggatacacagcagtattcatgcaagagggcagaatccaaata	1300
1985	GAAAAGGGCCCATAAATGCTTCAATTGTGGAAGAGGGACATATAGCA	2034
1301	gaaaagggcctataaaatgtttcaattgtggaaaagagggacatatagca	1350
2035	AAAACTGTGCGAGCACCTAGAAAAAGGGGTTGCTGGAAATGTGGACAGGA	2084
1351	aaaaactgtcgagcacctagaagaaggggttactggaaatgtggacagga	1400
2085	AGGTCACCAATGAAAGATTGCAAAAATGGAAGACAGGCAAATTTTTTAG	2134
1401	aggtcaccaaatgaaagattgcaaaaatggaagacaggctaatttttttag	1450
2135	GGAAGTACTGGCCTCCGGGGGGCACGAGGCCAGGCAATTATGTGCAGAAA	2184
1451	ggaagtactggcctccggggggcacgaggccagccaattatgtgcagaaa	1500

FIG. 6-3

2185	CAAGTGTCCCCATCAGCCCCACCAATGGAGGAGGCAGTGAAGGAACAAGA	2234
1501	caagtgtccccatcagccccaccaatggaggaggcagtgaaggaacaaga	1550
2235	GAATCAGAGTCAGAAGGGGGATCAGGAAGAGCTGTACCCATTTCCTCCC	2284
1551	gaatcagaatcaaaaggggatcaggaagagctgtacccatttgcctccc	1600
2285	TCAAATCCCTCTTTGGGACAGACCAATAGTCACAGCAAAGGTTGGGGGTC	2334
1601	tcaaatccctctttgggacagaccaatagtcacagcaaaggttgggggcc	1650
2335	ATCTATGTGAGGCTTTACTGGATACAGGGGCAGATGATACAGTATTAAAT	2384
1651	atctatgtgaggctttactggatacaggggcagatgatacagtattaaat	1700
2385	AACATACAATTAGAAGGAAGATGGACACCAAAA	2417 (SEQ ID NO:57)
1701	aacatacaattagaaggaagatggacacccaaa	1733 (SEQ ID NO:58)

FIG. 6-4

MVP5180 MGARASVLTGSKLDAWERIRLRPGSKKAYRLKHLVWASRELERYACNPGL
PCR MGARRSVLTGSKLDAWERIRLRPGSKKAYRLKHLVWASRELERYAYNPGL

LETAEGTEQLLOOLEPALKTGSEDLKSLWNAIAVLWCVHNRFDIRDTQQA
LETAEGTEQLLOOLEPALKTGSEDLKSLWNAIAVLWCVHNRFDIRDTQQA

IQKLKEVMASRKSAEAAKEETSPROTSONYPIVTNAOGOMVHOAISPRTL
IQKLKEVMASRKSAEAAKEETSSTQASQNYPIVTNAOGOMVHOAISPRTL

NAWVKAVEEKAFNPEIIPMFALSEGAVPYDINTMLNAIGGHQALQVLK
NAWVKAVEEKAFNPEIIPMFALSEGAVPYDINTMLNAIGGHQALQVLK

EVINEEAAEWDRTHTPPAMGPLPPGOIREPTGSDIAGTTSTQOEQI IWTR
EVINEEADWDRTHTPPAMGPLPPGOIREPTGSDIAGTTSTQOEQI IWTR

GANSIPVGDIYRKWIVLGLNKMVKMYSVPSILDIRQGPKEPFRDYVDRFY
GANSIPVGDIYRKWIVLGLNKMVKMYSVPSILDIRQGPKEPFRDYVDRFY

KTLRAEQATQEVKNWMTETLLVONSNPDCKQILKALGPEATLEEMMVACQ
KTLRAEQATQEVKNWMTETLVVQNSNPDCQILKALGPGATLEEMMVACQ

GVGGPTHKAKILAEAMASAQQDLKGGYTAVFMORGONPNRKGPIKCFNCG
GVGGPTHKAKILAEAMASAQQDLKGGYTAVFMORGONPNRKGPIKCFNCG

KEGHIAKNCRAPRKRCWKCGQEGHOMKDCKNGRQANFLGKYWPPGGTRP
KEGHIAKNCRAPRRRGYWKCGQEGHOMKDCKNGRQANFLGKYWPPGGTRP

GNYVQKQVSPSAPPMEEAVKEQENQSKGDOEELYPFASLSLFGTDQ (SEQ ID NO:59)
ANYVQKQVSPSAPPMEEAVKEQENQKQKGDQEELYPFASLSLFGTDQ (SEQ ID NO:60)

FIG. 7

HIV - 1 (LAI)
(SEQ ID NO:66)

HIV - 5180
(SEQ ID NO:54)

HIV - 2 (ROD)
(SEQ ID NO:67)

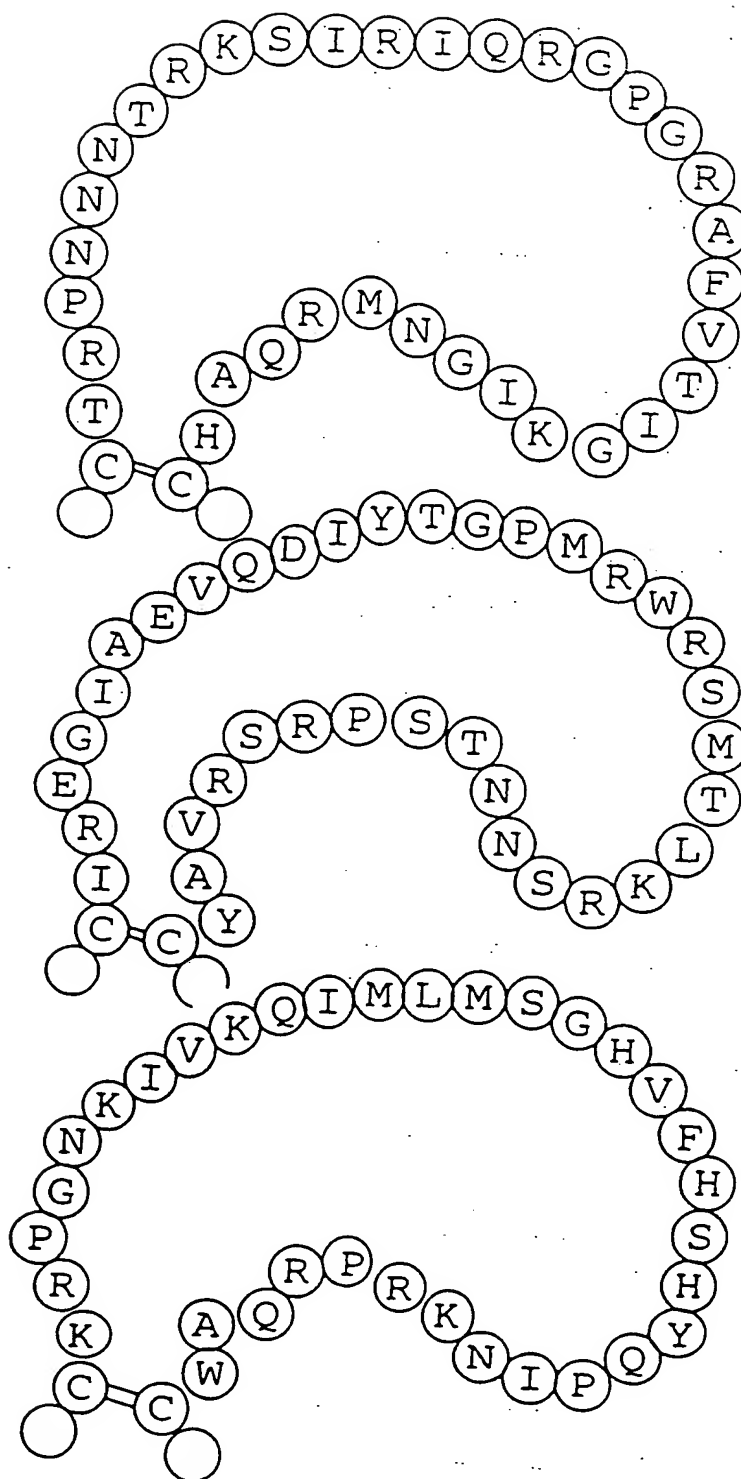


FIG. 8